DOCUMENT RESUME

ED 143 932 CG 011 711

AUTHOR Kinsell-Raney, Lynn W.; Deichmann, John W.
TITLE Sex Differences: An Obsolete Distinction in the Analysis of Classroom Task Approach Patterns.
PUB DATE 77
NOTE 8p.; Not available in hard copy due to marginal legibility of original document. Paper presented at the Annual Meeting of the American Educational Research Association (New York, N.Y., April 4-8, 1977)

EDRS PRICE MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS *Achievement; Androgyny; *Classroom Environment; Expectation; *Individual Psychology; *Motivation; *Personality; Research Projects; Sex Role; *Sex Stereotypes; *Task Performance; Undergraduate Students
IDENTIFIERS *Bem Sex Role Inventory

ABSTRACT

Undergraduate General Studies students, following classification by the Bem Sex Role Inventory, formed groups of 44 Stereotyped Masculine males, 36 Androgynous males, 33 Androgynous females, and 25 Stereotyped Feminine females. They predicted achievement on a neutral task and two sex-linked tasks, one of each sex. Almost no variance appears in the Androgynous and Stereotyped predictions for each sex on the neutral task. However, dramatic differences between Androgynous and Stereotyped groups within the same sex do appear in predictions on the sex-linked tasks. We conclude that differences in achievement expectations are less a product of sex differences than of role interpretation differences within each sex. Classroom implications for stereotyping/sex-linking tasks are discussed. (Author)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

BEST COPY AVAILABLE

HARD COPY NOT AVAILABLE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Lynn W. Kinsell-Rainey

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

ED143932

CG011711

SEX DIFFERENCES: AN OBSOLETE DISTINCTION IN THE ANALYSIS OF CLASSROOM TASK APPROACH PATTERNS

Lynn W. Kinsell-Rainey, Ph.D. and John W. Deichmann, Ph.D.

Southern Illinois University at Carbondale

Presented at the 1977 national meetings of the American Educational Research Association

ABSTRACT

Undergraduate General Studies students, following classification by the Bem Sex Role Inventory, formed groups of 44 Stereotyped Masculine males, 36 Androgynous males, 33 Androgynous females, and 25 Stereotyped Feminine females. They predicted achievement on a neutral task and two sex-linked tasks, one of each sex. Almost no variance appears in the Androgynous and Stereotyped predictions for each sex on the neutral task. However, dramatic differences between Androgynous and Stereotyped groups within the same sex do appear in predictions on the sex-linked tasks. We conclude that differences in achievement expectations are less a product of sex differences than of role interpretation differences within each sex. Classroom implications for stereotyping/sex-linking tasks are discussed.

"Sex differences" have been reported in the literature concerning achievement research since its beginnings(McClelland,1953). Until recently, these "sex differences" results for women were inconclusive, inconsistant, contradictory or insignificant (Lesser et al.,1973;Weiner & Kukla,1970;Atkinson, 1957, 1958,& 1964;Campbell, 1974;Crandall et al.,1962) with respect to the stated hypotheses. There did, however, evolve a comprehensive body of knowledge and theories governing achievement tendencies in men (Weiner,1970). As this situation began gradually changing (Horner,1968), researchers discovered and

and demonstrated complex differences, both between and within groups of both sexes in achievement related areas (Horner, 1970 & 1972). Further, it would appear from recent research that achievement and attributional behavior may be less determined by sex than by the sex role interpretation of members of both sexes (Frieze,1975; Kinsell-Rainey, 1976). The research reported here begins to explore the nature of the differences regarding achievement between women and men possessing different sex role interpretations.

With the introduction into the research domain of the Bem Sex Role Inventory (BSRI) (Bem,1974), it became possible to put aside the obsolete notion implicit in M-F scales of a bi-polar, mutually exclusive continuum, which contained great amounts of one sex's characteristics only as it contained less amounts of the other sex's. The development of the BSRI has presented the researcher with a realistic tool to explore the concept of androgyny in all areas of behavior analysis, personality development, and achievement orientation. The topic which this paper presents was designed to explore, within the achievement sphere of classroom expectations and behavior, both androgynous and stereotyped groups of male and female students' similarities and differences.

Three hundred and seventeen undergraduate volunteers from a General Studies Design class acted as subjects for the experiment. The data used was obtained from one hundred and thirty eight of the students.

Materials were obtained, in part, through Rita Jackaway and serve to replicate part of her Low Expectancy Cycle research presented at the 1975 American Psychological Association meetings. Her female (1F) and male (1M) tasks are, in fact, identical, differing only in title and instructions which determine their sex-linkage. 1F is an "embroidery color matching" task, while 1M is a "nuclear wiring diagram." Both require symbol coding matching behavior. In order to control for possible order effects and subject realization of task similarity, a new sex-linked task was developed. This task requires tracing

behavior. As above, the female and male task are identical, differing only by title and instructions. The female task (2F) is a "weaving free-form maze" while the male task (2M) is a "telephone interchange." A sex neutral task (N) was also developed which required anagram solution. Booklets were compiled containing the N task first, and one of the four possible orders of the sex-linked tasks. The booklets produced the four treatment conditions for this research: N/1M/2F, N/2M/1F, N/1F/2M, and N/2F/1M.

Each student randomly received one of the four orders of the booklet containing the three task formats with instructions. Each student predicted expected performance level and evaluated this performance level as more or less successful in comparison with the imagined performance of peers for each of the three tasks. Upon completing the booklets, the students filled out a personal history questionnaire, and the BSRI. The total time requirement was approximately forty minutes.

Of the original three hundred and seventeen students, eighty-seven were dropped due to incomplete data. This resulted in an analysis of two hundred and thirty students (102 women and 128 men). Of this total, 30 percent obtained scores on the BSRI which are considered androgynous (with mean totals for masculine and feminine characteristics falling above the "Indeterminate" range (Bergins, et al., 1975). Thirty seven percent of the population received scores in the stereotyped range, with the remainding 33 percent of the students ranging between androgyny and stereotype (thus making them ineligible for further inclusion in the study).

Four Sex Role Groups by Number and Percent

52 stereotyped masculine (44 men/8 women)	MM	27% of 230 students tested
36 androgynous (36 men)	AM	16%
33 androgynous (33 women)	AF	14%
31 stereotyped feminine (25 women/6 men)	FF	13%

Figure 1

Initial analysis, regarding possible order effects, demonstrated no effect for order presentation. The 2F and 2M mazes were, however, perceived to be easier than the 1F and 1M coding task during the initial prediction phase. The data were collapsed for the following analyses. As anticipated, the predictions on the neutral, masculine, and feminine task appear differently when displayed according to sex or sex-role interpretation. The following is a summary of success predictions according to sex and sex-role interpretation.

Predictions by Sex-Role Interpretation Groups and by Sex on Neutral, Masculine, and Feminine Sex-Linked Tasks

Predictions of Success	MM	AM	All Males	AF	FF	All Females
Neutral Task	20/46%	17/47%	37/47%	9/27%	7/28%	16/28%
Masculine Task	36/83%	27/76%	66/83%	18/55%	7/28%	25/40%
Feminine Task	22/50%	19/53%	41/51%	20/60%	20/80%	40/67%

Figure 2

From Figure 2 it can be seen that there is no difference among male sex role interpretation groups on neutral task predictions. It can also be seen that there is no difference among female sex role interpretation groups on neutral task predictions. However, comparing all females and all males in neutral task predictions, there is a significant non-chance difference ($p=.017$). From Figure 2 it can be seen that there is a difference among male sex role interpretation groups on the male sex linked tasks. The masculine stereotyped males expected to succeed at a greater rate than the androgynous males ($p=.040$). It can also be seen that there is a difference among female sex role interpretation groups on the male sex-linked tasks. The androgynous females expected to succeed at a greater rate than the feminine stereotyped females ($p=.001$). Finally, from Figure 2, it can be seen that there is no

significant difference among male sex role interpretation groups on the female sex-linked tasks. However, it can be seen that, among female sex role interpretation groups, the feminine stereotyped females expected to succeed at a greater rate than the androgynous females on the female sex-linked tasks ($p=.044$).

Conclusion

How many classroom subjects are traditionally viewed as appropriate areas of competence to one or the other sex? How many classroom subjects are presented to students as appropriate areas for one or the other sex to be successful? And if, within the classroom, "sex-appropriateness" of each subject is covertly or overtly implied, what affect does this sex-typing of subject have upon students of each sex and differing sex role interpretation?

Because of the striking contrast between androgynous and stereotyped students' task approach patterns for sex-linked tasks, it is important to objectively evaluate learning environments for sex-appropriate labelled activities. The subtle stereotyping of classroom activities can effectively inhibit success expectations of those students who's sex-role interpretation does not include the activity as socially acceptable (e.g., math/science for girls; reading/art/music for boys). This influence can prevent the psychological, intellectual, and emotional growth of the child/student in the classroom, and further perpetuate the rigid sex-role boundaries which limit self-actualization. The conscious removal of sex-linked references to classroom activities and sex-linked learning prejudices can raise all students' success expectations.

Bibliography

Atkinson, J. W., "Motivational Determinants of Risk-Taking Behavior," Psychological Review 64, 368-369, 1957.

Atkinson, J.W. Motives in Fantasy, Action, and Society. New York: Van Nostrand, 1958.

Atkinson, J.W. An Introduction to Motivation. Princeton, N.J.: Van Nostrand, 1964.

Bem, Dandra, "The Measurement of Psychological Androgyny," Journal of Counseling and Clinical Psychology, 47, 2, 155-162, 1974.

Campbell, Patricia, "From Tomboy to Femme Fatale: What Are We Doing to Our Adolescent Girls?" unpublished ms., University of Georgia, 1974.

Crandall, Vaughn, Walter Katovsky, and Ann Preston, "Motivation and Ability Determinants of Young Children's Intellectual Achievement Behaviors," Child Development, 33, 643-661, 1962.

Frieze, Irene, "Women's Expectations for and Causal Attributions of Success and Failure," in Mednick, M., S. Tangri and L. Hoffman (eds.), Social Psychological Perspectives on Achievement. New York: Holt, Rinehart and Winston, 1975.

Horner, Matina, "Sex Differences in Achievement Motivation and Performance in Competitive and Non-Competitive Situations," unpublished Ph.D. dissertation, University of Michigan, 1968.

Horner, Matina, "Femininity and Successful Achievement: A Basic Inconsistancy," Feminine Personality and Conflict. Belmont, Calif.: Brooks/Cole, 1970.

Horner, Matina, "Toward an Understanding of Achievement Related Conflicts in Women," Journal of Social Issues, 28, 2, 245-269, 1972.

Jakaway, Rita, "Low Expectancy Cycle," paper presented at the American Psychological Association annual meetings, 1975.

Kinsell-Rainey, Lynn, "Achievement and Attribution Patterns as a Function of Sex-Role Interpretation: A Comparison of Androgynous and Stereotyped College Students," unpublished Ph.D. dissertation, Southern Illinois University, 1976.

Lesser, Gerald S., Rhoda N. Kravitz, and Rita Packard, "Experimental Arousal of Achievement Motivation in Adolescent Girls," Journal of Abnormal and Social Psychology, 66, 1, 59-66, 1963.

McClelland, David C., "Measuring Motivation in Phantasy: The Achievement Motive," Measuring Human Motivation, 87-103, 1951.

Weiner, Bernard. Theories of Motivation. Chicago: Rand McNally, 1972.

Weiner, Bernard, Achievement Motivation and Attribution Theory. New York: General Learning Press, 1974.

Weiner, Bernard (ed.), Cognitive Views of Human Motivation. New York: Academy Press, 1974.

Weiner, Bernard and Andy Kukla, "An Attribution Analysis of Achievement Motivation," Journal of Personality and Social Psychology, 15, 1, 1-20, 1970.